



PATENT APPLICATION

PATENT AND TRADEMARK OFFICE

BEFORE THE HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of

Hiroshi KISHI et al.

On Appeal from Group: 2674

Application No.: 09/698,441

Examiner: A. Abdulsalam

Filed: October 30, 2000

Docket No.: 107427

For: CONTROL APPARATUS AND METHOD FOR INPUT SCREENS

APPEAL BRIEF TRANSMITTAL

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For the convenience of the Finance Division, two additional copies of this transmittal letter are attached.

Respectfully submitted,

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AF/2674/20
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BRIEF ON APPEAL

Appeal from Group 2674

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I. INTRODUCTION

This is an appeal from an Office Action mailed January 12, 2004, finally rejecting claims 1-20 of the above-identified patent application.

A. Real Party in Interest

The real party in interest in this appeal in the present application is Toyota Jidosha Kabushiki Kaisha, by way of an assignment recorded at reel/frame 11268/0767.

B. Statement of Related Appeals and Interferences

There are presently no appeals or interferences, known to Applicants, Applicants' representative or the Assignee, which will directly affect, be directly affected by or have a bearing on the Board's decision in the pending appeal.

C. Status of Claims

Claims 1-20 are pending. Claims 1-20 are on appeal. Of the claims that are on appeal, claims 1, 4, 8 and 15-20 are independent claims. Claims 2 and 3 depend from claim 1. Claims 5-7 depend from claim 4. Claims 9-14 depend from claim 8. Claims 1-20 are set forth in the attached Appendix.

D. Status of Amendments

The April 12, 2004 Amendment After Final Rejection amended claims 1-4, 7, 8 and 15-20. The May 3, 2004 Advisory Action refused entry of the Amendment After Final Rejection.

The May 11, 2004 Second Amendment After Final Rejection amended claims 1-4, 7, 8 and 15-20. The June 1, 2004 Advisory Action indicated that the Second Amendment After Final Rejection "will be entered for the purposes of appeal." (See, paragraph 7, Advisory Action mailed June 1, 2004.)

Accordingly, the amended claims of May 11, 2004 are set forth in the attached Appendix for the purposes of appeal.

II. SUMMARY OF THE INVENTION AND APPLIED REFERENCES

A. Summary of the Invention

The invention is directed to various embodiments of a control apparatus for input screens that are installed in a vehicle. The control apparatus may include a display unit, a switch portion and a control unit including a microcomputer. See specification at page 8, lines 26-29. If a menu switch or a dummy switch included in a screen displayed by the display unit is operated, the microcomputer causes the display unit to display a new screen including a plurality of dummy switches. See specification at page 9, lines 1-13 and line 23 through page 10, line 12. The microcomputer estimates a time period required for the operator to watch a screen to operate the dummy switch. See specification at page 5, lines 19-29; page 7, lines 9-16; and page 10, lines 12-20. If the sum of estimated time periods exceeds a reference time period, the microcomputer nullifies operation of the dummy switch to prevent the screen from being switched. See specification at page 6, lines 8-15. After the lapse of a predetermined time period, the microcomputer cancels the nullification of the operation of the dummy switch. See specification at page 6, lines 16-20. An alternative embodiment of a control apparatus for input screens may also include a remote control device. See specification at page 23, lines 14-23.

The invention also provides for various control methods for input screens that are installed in a vehicle. For example, a control method may be employed to input a predetermined operation performed by an operator and change information to be displayed by the display device upon input of the operator guidance. See specification at page 10, lines 8-12. Alternatively, a control method for input screens that are installed in a vehicle may be employed to cause the display device to display new information corresponding to one of the dummy switches that has selectively been operated. See specification at page 10, lines 1-6 and lines 12-20. Yet, another alternative control method for input screens may also include

operating a dummy switch by means of a remote control device. See specification at page 23, lines 24-29.

As a result, it is judged whether or not a predetermined condition for prohibited input operation has been fulfilled, depending on the complexity of displayed information. See specification at page 3, lines 4-12. Accordingly, input operation can be prohibited at a timing better suited for driving of a vehicle. See specification at page 3, lines 12-13.

B. The Claimed Invention

The claimed invention is directed to various embodiments of control apparatus and methods for input screens that are installed in a vehicle. See specification at page 1, lines 11-15 and claims 1-20. The control apparatus or method may be variously provided to input a predetermined operation performed by an operator based on information displayed by a display device as operator guidance and change information upon input of the operator guidance. See specification at page 2, lines 6-10 and claims 1-3, 15, 18 and 20.

Alternatively, the control apparatus or method for input screens that are installed in a vehicle may be variously provided to cause a display device to display information including a plurality of dummy switches and cause the display device to display new information corresponding to one of the dummy switches that has selectively been operated. See specification at page 4, lines 1-5 and claims 4-14, 16, 17, and 19. The various exemplary embodiments include an operation nullification device (or means) which serves to prohibit a predetermined operation upon fulfillment of a predetermined traveling condition related to operation of a vehicle to prevent unsafe operation while the vehicle is traveling. See specification at page 2, lines 10-13 and claims 1, 4, 8 and 15-20. Certain other specific features of the various exemplary embodiments of the control apparatus are briefly described below.

An exemplary embodiment of the invention provides a control apparatus for input screens that are installed in a vehicle, the control apparatus including an operation nullification device (or means) and an operation nullification canceller (or means), the operation nullification canceller canceling a prohibition against the inputting of the predetermined operation performed by the operator as operator guidance if a predetermined time period has elapsed since the prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance. See specification at page 2, lines 6-18 and claims 1, 4, 15 and 16. Alternatively, an exemplary embodiment of the invention may also include a screen controller. See specification at page 4, lines 1-12 and claims 4 and 16. Other exemplary embodiments of the claimed invention are directed to various control methods for input screens that are installed in a vehicle. See specification at page 1, lines 19-29 and claims 4 and 16.

Another exemplary embodiment of the invention provides a control apparatus for input screens that are installed in a vehicle, the control apparatus including a summation time period calculator and an operation nullification device, the summation time period calculator estimating a time period required for an operator to watch the displayed information to selectively operate one of the dummy switches included in the displayed information during a period from the start to the stop of a vehicle, estimating a time period required for the operator to watch newly displayed information to selectively operate one of a plurality of dummy switches included in the newly displayed information, and calculating a sum of the estimated time periods. See specification at page 5, lines 14-29 and claims 8 and 17. Similarly, another exemplary embodiment of the invention provides a control method for input screens. See specification at page 6, lines 2-15 and claim 20.

C. The Rejection

The Final Rejection rejects claims 1-20 under 35 U.S.C. §103(a) over U.S. Patent 6,593,667 to Onodera et al. in view of U.S. Patent 5,850,076 to Morioka et al., and U.S. Patent 6,025,869 to Stas et al.

D. The Applied References

1. U.S. Patent 6,593,667 to Onodera et al. ("Onodera")

Onodera discloses a car-mounted control device which provides an operator the feel of graduated resistance or operational limitations in controlling electrical devices (e.g., to simulate a seat control). Control knobs and shafts for electrical devices are specially fitted with graduated resistance with the use of encoders, tables, and drive control motors. The specially fitted control knobs and shafts allow the operator to feel the graduated resistance for better user control of settings (abstract).

However, Onodera does not relate to any subject matter of controlling input to a device by an operator based on whether or not a predetermined traveling condition is occurring, as set forth in the claims. Rather, Onodera seeks to refine the driver control of electrical devices by specially fitting the control knobs or shafts with graduated resistance appropriate for the control of an electrical device.

2. U.S. Patent 5,850,076 to Morioka et al. ("Morioka")

Morioka teaches an automated transaction device capable of allowing a user selection and/or cancellation of an ATM transaction (col. 6, lines 18-21). Specifically, Morioka allows selection of an ATM transaction mode, such as ATM deposit, or cancellation of the of the selected ATM transaction mode, if a "NO" selection is made within a predetermined lapsed period from the initial selection (col. 11, lines 13-23).

However, Morioka also does not teach or suggest controlling input to a device by an operator based on whether or not a predetermined traveling condition is occurring, as set forth

in the claims. Rather, Morioka seeks to improve operating transactions in an automatic transaction apparatus (ATM) setting (col. 1, lines 9-14).

3. U.S. Patent 6,025,869 to Stas et al. ("Stas").

Stas teaches a video viewing supervision system intended for parental control of TV viewing. Specifically, the system allows a parent to block a specific channel, times, or selected programs (col. 8, lines 18-21). During the blocked times, the system ignores any requests entered from remote control unit 12 or keypad 26 for changing the channel viewing (col. 8, lines 7 -9).

However, Stas also does not teach or suggest controlling input to a device by an operator based on whether or not a predetermined traveling condition is occurring, as set forth in the claims. Rather, Stas relates to an improved supervision system for parental control of children's viewing of TV or video (abstract).

III. THE ISSUE ON APPEAL

1. Did the Examiner present a *prima facie* case that claims 1-20 would have been rendered obvious by Onodera in view of Morioka and Stas?

IV. GROUPING THE CLAIMS ON APPEAL

Each claim of this patent application on appeal is separately patentable, and upon issuance of a patent will be entitled to a separate presumption of validity under 35 U.S.C.

§282. For convenience in the handling of this appeal, the claims are grouped as follows:

Group I, claims 1-7, 15, 16, 18 and 19.

Group II, claims 8-14, 17 and 20.

Each of Groups I and II are argued separately in the following arguments. The groups do not stand or fall together.

V. ARGUMENT

A. Relevant Legal Principles

In rejecting claims under 35 U.S.C. 103, it is incumbent on the examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), including: (A) determining the scope and content of the prior art; (B) ascertaining the differences between the prior art and the claims in issue; (C) resolving the level of ordinary skill in the pertinent art; and (D) evaluating evidence of secondary considerations.

In rejecting claims, the Patent Office bears the initial burden of persuasion in establishing a *prima facie* case of obviousness. A showing of a suggestion, teaching, or motivation to combine the prior art references is an “essential evidentiary component of an obviousness holding.” C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not “evidence.” See Dembiczak, 175 F.3d at 1000, 50 USPQ2d at 1617.

Patent case law is clear that in considering the differences, the question is not whether the differences themselves would have been obvious, but rather whether the claimed invention "as a whole" would have been obvious. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983). In order to consider the invention "as a whole", the Examiner must consider the context in which the invention was made, problems solved by the invention and the like. See In re Antonie, 559 F.2d 618, 620, 195 USPQ 6, 8 (CCPA 1977) where it was held that in delineating the invention as a whole, one looks "not only to the subject matter literally recited in the claims...but also to the properties of the subject

matter which are inherent in the subject matter and are disclosed in the specification." Also see *In re Spinnoble*, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969) where it was found that discovery of the source of a problem is also part of the "subject matter as a whole" inquiry.

B. The Examiner failed to present *prima facie* case that claims 1-7, 15, 16, 18 and 19 would have been rendered obvious by Onodera in view of Morioka and Stas.

Claims 1-7, 15, 16, 18 and 19 stand finally rejected under 35 U.S.C. §103(a) over Onodera in view of Morioka and Stas.

An exemplary feature of all of the claims relates to prohibiting a predetermined operation performed by an operator. For example, claim 1 recites an "operation nullification device that prohibits the predetermined operation performed by the operator from being inputted as the operator guidance upon fulfillment of a predetermined traveling condition related to operation of the vehicle to prevent unsafe operation while the vehicle is traveling." Onodera, Morioka and Stas do not teach or suggest at least the recited claim features.

Independent claims 1, 15 and 18 further distinguish over Onodera, Morioka and Stas by virtue of the additional features they recite. For example, claim 1 further recites, and claims 15 and 18 similarly recite, *inter alia*, "cancels prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance if a predetermined time period has elapsed since the prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance."

As the Examiner admits, "Onodera does not teach inputting predetermined operation performed by an operator based on information displayed by the display device, and changing information to be displayed by the display device upon input of operator guidance" (January 12, 2004 Office Action at page 2). The Examiner further admits that "Onodera also does not

teach 'operation nullification device' and 'operation nullification canceller'" (January 12, 2004 Office Action at page 3).

Morioka does not cure the deficiencies of Onodera. Instead, Morioka relates to an automatic transaction apparatus (ATM), an automatic remitter or a bond issuing machine, and is directed to an improvement of the transaction operation in an automated transaction apparatus (col. 1, lines 7-14).

At page 3 of the Final Rejection, the Examiner asserts that Morioka "teaches a selection processor (7) performing a predetermined process based on the information selectively input by the user through a display device (1) and the selection input unit (5)." The Examiner asserts that Morioka teaches a selection procedure in terms of predetermined period of time. See Final Rejection at page 3. However, Morioka, like Onodera, does not teach or suggest controlling input to a device by an operator based on whether or not a predetermined traveling condition is occurring, as set forth in the claims.

Morioka teaches cancellation of the selected ATM transaction mode, if a "NO" selection is made within a predetermined lapsed period from the initial selection (col. 11, lines 13-23). So, according to Morioka, an action by the user causes a cancellation of the selected ATM transaction mode. In contrast, in the claimed invention, a user input is prohibited based on whether or not a predetermined traveling condition is occurring and inaction by the user results in cancellation of the prohibition of a user input.

Stas also does not cure the deficiencies of Onodera. Instead, Stas relates to a video viewing supervision system which allows selective blocking of TV/video viewing by children (abstract).

At page 4 the Final Rejection, the Examiner asserts that Stas teaches blocking of viewer reception of video programming, and "if a user requests that a viewing is to be blocked, the reception of the composite input signal is interrupted and a default image is

displayed on monitor (20A)." However, like Onodera and Morioka, Stas does not teach or suggest controlling input to a device by an operator based on whether or not a predetermined traveling condition is occurring, as set forth in the claims.

Stas teaches that television viewing is permitted within a time limit previously programmed (col. 8, lines 16-17). Specifically, the system allows a parent to block a specific channel, times, or selected programs (col. 8, lines 18-21). So, according to Stas, the user freely programs blocking of a specific channel, times, or selected programs. In contrast, in the claimed invention, a user input is prohibited based on whether or not a predetermined traveling condition is occurring and inaction by the user results in cancellation of the prohibition of a user input.

None of the applied references teach controlling input to a device by an operator, as set forth in the claims, wherein 1) a user input is prohibited based on whether or not a predetermined traveling condition is occurring and 2) inaction by the user results in cancellation of the prohibition of a user input.

To rely on a reference under 35 U.S.C. §103(a), the reference must be analogous prior art. See, e.g., MPEP §2141.01(a). With respect to at least the secondary references, Morioka relates to an unrelated field of ATM transactions and Stas relates to an unrelated field of TV & video viewing control. Morioka and Stas do not remotely identify or suggest a solution to the unique problem of prohibiting input operation at a timing better suited for driving of a vehicle. Accordingly, the secondary references (Morioka and Stas) are nonanalogous references, and thus are not properly combined with Onodera as applied against the instant application.

Independent claims 1, 4, 15, 16, 18 and 19 would not have been rendered obvious by Onodera in view of Morioka and Stas for at least the reasons discussed above. The applied references also fail to render obvious the subject matter of dependent claims 2 and 3, which

depend from claim 1, and dependent claims 5-7, which depend from claim 4, and are thus allowable at least for their dependence thereon and for the additional features recited therein.

Reversal of the rejection under 35 U.S.C. §103(a) is therefore respectfully solicited.

C. The Examiner failed to present *prima facie* case that claims 8-14, 17 and 20 would have been rendered obvious by Onodera in view of Morioka and Stas.

Claims 8-14, 17 and 20 stand finally rejected under 35 U.S.C. §103(a) over Onodera in view of Morioka and Stas.

Claims 8, 17 and 20, like the claims of Group I, recite the feature of controlling input to a device by an operator based on whether or not a predetermined traveling condition is occurring, as set forth with respect to Group I. The claims thus would not have been rendered obvious by Onodera in view of Morioka and Stas for at least the reasons set forth above. Claims 9-14 each depend from claim 8, and thus also would not have been rendered obvious by the cited references for at least the reasons discussed with respect to Group I, as well as for the additional features they recite.

Independent claims 8, 17 and 20 further distinguish over Onodera, Morioka and Stas for the following reasons. Claim 8 further recites, and claims 17 and 20 similarly recite, *inter alia*, "estimates a time period required for an operator to watch the displayed information to selectively operate one of the dummy switches included in the displayed information during a period from the start to the stop of the vehicle, estimates a time period required for the operator to watch newly displayed information to selectively operate one of a plurality of dummy switches included in the newly displayed information, and calculates a sum of the estimated time periods." Onodera, Morioka and Stas do not teach or suggest the recited estimated time periods.

Onodera provides no teaching whatsoever regarding calculating a sum of estimated time periods.

Stas does not cure the deficiencies of Onodera. The Examiner asserts that Stas discloses blocking of selected channels during selected periods. The Examiner concludes "therefore, it would have been obvious that Stas' programming matrix pattern can be used to obtain the desired 'summation time period'" (January 12, 2004 Office Action at page 5). However, the claimed estimated time periods are substantially different than Stas' programming matrix pattern.

Stas' programming matrix pattern relates to a monitor display of a calendar schedule to conveniently program viewing blocking periods, but this is substantially different from estimating time periods for an operator to respond to a new screen displays. According to Stas, the user blocks selected channels during selected periods. In contrast, in the claimed invention, a time period required to watch newly displayed information and operate a dummy switches is estimated, and a sum of the estimated time periods are calculated to decide the prohibition of user input.

Morioka also does not cure the deficiencies of Onodera. Morioka teaches cancellation of the selected ATM transaction mode (col. 11, lines 13-23). So, according to Morioka, an action by the user merely causes a cancellation of the selected ATM transaction mode. In contrast, in the claimed invention, a time period required to watch newly displayed information and operate a dummy switches is estimated, and a sum of the estimated time periods are calculated to decide the prohibition of user input.

None of the applied references teach controlling input to a device by an operator based on estimating a time period required to watch newly displayed information and operate a dummy switches.

Also, as discussed above, at least the secondary references (Morioka and Stas) are nonanalogous references, and thus are not properly combined with Onodera as applied against the instant application.

Accordingly, independent claims 8, 17 and 20 would not have been rendered obvious by Onodera in view of Morioka and Stas. The applied references also fail to render obvious the subject matter of dependent claims 9-14, which depend from claim 8, and are allowable at least for their dependence thereon and for the additional features recited therein.

Reversal of the rejection under 35 U.S.C. §103(a) is therefore respectfully solicited.

VI. Conclusion

For at least the reasons discussed above, it is respectfully submitted that claims 1-20 contain patentable subject matter and are distinguishable over the applied references.

Applicant respectfully requests the Honorable Board to reverse the final rejection of the claims and return the application to the Examiner to pass this case to issue.

Respectfully submitted,



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Enclosure:
Appendix of Claims



APPENDIX A

CLAIMS:

1. A control apparatus for input screens that is installed in a vehicle and constructed to input predetermined operation performed by an operator based on information displayed by display device as an operator guidance and change information to be displayed by the display device upon input of the operator guidance, comprising:

operation nullification device that prohibits the predetermined operation performed by the operator from being inputted as the operator guidance upon fulfillment of a predetermined traveling condition related to operation of the vehicle to prevent unsafe operation while the vehicle is traveling; and

operation nullification canceller that cancels prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance if a predetermined time period has elapsed since the prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance.

2. The control apparatus according to claim 1, wherein:

the operation nullification device is constructed to judge whether or not the predetermined traveling condition has been fulfilled, depending on information displayed by the display device.

3. The control apparatus according to claim 1, further comprising:

first operation device for performing the predetermined operation based on a first action made by the operator; and

second operation device for performing the predetermined operation based on a second action made by the operator, the second action being different from the first action, wherein:

the operation nullification device that judges whether or not the predetermined traveling condition has been fulfilled, depending on whether the predetermined operation is performed by the first operation device or by the second operation device.

4. A control apparatus for input screens that is installed in a vehicle, comprising:
screen controller that causes display device to display information including a plurality of dummy switches and changing the information displayed by the display device to information corresponding to the operated dummy switch; and

operation nullification device that nullifies operation of the dummy switch upon fulfillment of a predetermined traveling condition related to operation of the vehicle and prohibits information displayed by the display device from being changed based on the operation to prevent unsafe operation while the vehicle is traveling,

wherein the operation nullification device is constructed to judge whether or not the predetermined condition has been fulfilled, depending on the number of dummy switches included in information displayed by the display device.

5. The control apparatus according to claim 4, further comprising:
operation nullification canceller that cancels nullification of operation of the dummy switch if a predetermined time period has elapsed since the start of nullification of the operation by the operation nullification device.

6. The control apparatus according to claim 4, further comprising:
operation nullification canceller that cancels nullification of the operation of the dummy switch by the operation nullification device if the vehicle has stopped.

7. The control apparatus according to claim 4, further comprising:
first operation device for performing the predetermined operation based on a first action made by the operator; and

second operation device for performing the predetermined operation based on a second action made by the operator, the second action being different from the first action, wherein the operation nullification device is constructed to judge whether or not the predetermined traveling condition has been fulfilled, depending on whether the predetermined operation is performed by the first operation device or by the second operation device.

8. A control apparatus for input screens that is installed in a vehicle and constructed to cause display device to display information including a plurality of dummy switches and cause the display device to display new information corresponding to one of the dummy switches that has selectively been operated, comprising:

summation time period calculator that estimates a time period required for an operator to watch the displayed information to selectively operate one of the dummy switches included in the displayed information during a period from the start to the stop of the vehicle, estimates a time period required for the operator to watch newly displayed information to selectively operate one of a plurality of dummy switches included in the newly displayed information, and calculates a sum of the estimated time periods; and

operation nullification device that nullifies operation performed by the operator for selection of one of a plurality of dummy switches included in the newly displayed information if the summation time period during a traveling condition is longer than a reference time period, and prohibits new information corresponding to the operated dummy switch from being displayed by the display device to prevent unsafe operation while the vehicle is traveling.

9. The control apparatus according to claim 8, further comprising:

operation nullification canceller that cancels nullification of operation of the dummy switch if a predetermined time period has elapsed since the start of nullification of the operation by the operation nullification device.

10. The control apparatus according to claim 8, further comprising:

operation nullification canceller that cancels nullification of operation of the dummy switch by the operation nullification device if the vehicle has stopped.

11. The control apparatus according to claim 8, further comprising:

operation nullification canceller that cancels nullification of operation of the dummy switch by the operation nullification device if a predetermined time period has elapsed since the start of the nullification or if the vehicle has stopped.

12. The control apparatus according to claim 8, wherein:

the summation time period calculator is constructed to calculate the summation time period for information that is displayed after cancel of nullification of the operation.

13. The control apparatus according to claim 8, wherein:

the summation time period calculator is constructed to estimate a time period required to watch the displayed information, depending on the number of the dummy switches included in the information.

14. The control apparatus according to claim 8, further comprising:

first operation device for performing operation of the dummy switch based on a first action made by the operator; and

second operation device for performing operation of the dummy switch based on a second action made by the operator, the second action being different from the first action,

wherein the summation time period calculator is constructed to estimate a time period required to watch the information, depending on whether the operation of the dummy switch is performed by the first operation device or by the second operation device.

15. A control apparatus for input screens that is installed in a vehicle and constructed to input predetermined operation performed by an operator based on information displayed by display device as an operator guidance and change information to be displayed by the display device upon input of the operator guidance, comprising:

operation nullification means for prohibiting the predetermined operation performed by the operator from being inputted as the operator guidance upon fulfillment of a predetermined traveling condition related to operation of the vehicle to prevent unsafe operation while the vehicle is traveling; and

operation nullification cancel means for canceling prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance if a predetermined time period has elapsed since the prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance.

16. A control apparatus for input screens that is installed in a vehicle, comprising:

screen control means for causing display device to display information including a plurality of dummy switches and changing the information displayed by the display device to information corresponding to the operated dummy switch; and

operation nullification means for nullifying operation of the dummy switch upon fulfillment of a predetermined traveling condition related to operation of the vehicle and prohibiting information displayed by the display device from being changed based on the operation to prevent unsafe operation while the vehicle is traveling,

wherein the operation nullification means is constructed to judge whether or not the predetermined condition has been fulfilled, depending on the number of dummy switches included in information displayed by the display device.

17. A control apparatus for input screens that is installed in a vehicle and constructed to cause display device to display information including a plurality of dummy switches and cause the display device to display new information corresponding to one of the dummy switches that has selectively been operated, comprising:

summation time period calculation means for estimating a time period required for an operator to watch the displayed information to selectively operate one of the dummy switches included in the displayed information during a period from the start to the stop of the vehicle, estimating a time period required for the operator to watch newly displayed information to selectively operate one of a plurality of dummy switches included in the newly displayed information, and calculating a sum of the estimated time periods; and

operation nullification means for nullifying operation performed by the operator for selection of one of a plurality of dummy switches included in the newly displayed information if the summation time period during a traveling condition is longer than a reference time period, and prohibiting new information corresponding to the operated dummy switch from being displayed by the display device to prevent unsafe operation while the vehicle is traveling.

18. A control method for input screens that is installed in a vehicle and constructed to input predetermined operation performed by an operator based on information displayed by display device as an operator guidance and change information to be displayed by the display device upon input of the operator guidance, comprising the steps of:

prohibiting the predetermined operation performed by the operator from being inputted as the operator guidance upon fulfillment of a predetermined traveling condition

related to operation of the vehicle to prevent unsafe operation while the vehicle is traveling;
and

canceling prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance if a predetermined time period has elapsed since the prohibition against the inputting of the predetermined operation performed by the operator as the operator guidance.

19. A control method for input screens that is installed in a vehicle, comprising the steps of:

causing display device to display information including a plurality of dummy switches and changing the information displayed by the display device to information corresponding to the operated dummy switch;

judging whether or not a predetermined traveling condition related to operation of the vehicle has been fulfilled, depending on the number of dummy switches included in information displayed by the display device to prevent unsafe operation while the vehicle is traveling; and

nullifying operation of the dummy switch upon fulfillment of a predetermined condition and prohibiting information displayed by the display device from being changed based on the operation.

20. (Currently Amended) A control method for input screens that is installed in a vehicle and constructed to cause display device to display information including a plurality of dummy switches and cause the display device to display new information corresponding to one of the dummy switches that has selectively been operated, comprising the steps of:

estimating a time period required for an operator to watch the displayed information to selectively operate one of the dummy switches included in the displayed information during a period from the start to the stop of the vehicle;

estimating a time period required for the operator to watch newly displayed information to selectively operate one of a plurality of dummy switches included in the newly displayed information;

calculating a sum of the estimated time periods; and

nullifying operation performed by the operator for selection of one of a plurality of dummy switches included in the newly displayed information if the summation time period during a traveling condition is longer than a reference time period, and prohibiting new information corresponding to the operated dummy switch from being displayed by the display device to prevent unsafe operation while the vehicle is traveling.